

nivent backwards, lemon yellow becoming orange at base, brownish-red above beset more or less throughout with long hairs (3-4 lines), the lower yellow or deep orange, the upper dark reddish brown; gland round-elliptical, naked but enclosed by a fimbriate ring of long, erect, converging, orange colored hairs: anthers light snuff-color, obtuse, two or three lines long: capsules narrowly oblong with thick, obtuse angles.

This peculiar Mariposa stands near *C. Weedii* and *C. clavatus*, resembling the former in its corm, leaves, etc., and the latter in its markings, pubescence, etc., but it is abundantly distinguished by its short, comparatively narrow, often bifid petals, etc.

On dry, stony hills near San Luis Obispo, Cal., on the premises of Dr. W. W. Hays, May 25, 1886. Collected in 1882 further eastward by Miss Georgie Hays, Miss Dalidet, Mrs. R. W. Summers and others.—J. G. LEMMON.

A rare fern.—Mr. John Spence, of Santa Barbara, recently discovered a rare fern in the high mountain regions of Santa Barbara county, which appears to be a South American *Notholæna*, *N. tenera* Gill., not heretofore reported in the United States except in a single locality in Southern Utah. In form and manner of growth it resembles *Notholæna nivea* Desv. (See Hooker & Baker's "Synopsis Filicum" p. 374.) As *N. nivea* is placed under the subdivision *Cincinnatiæ*, characterized by the fronds being coated with white or yellow powder, and these specimens show no trace of such powder, they must be placed under the subdivision *Eunothochlæna*, in which the fronds are not farinose beneath, and under the specific name given above, a fern found in the Andes of Bolivia and Chili, which the best authorities (see Sir J. W. Hooker's *Species Filicum*, vol. 5. p. 112) state is a very doubtfully distinct species from *N. nivea*, from which it differs only in the absence of the powder beneath.

Prof. D. C. Eaton in his "Ferns of North America" figures *N. tenera* found in Southern Utah, but the plate is too poor to give a correct idea of the species, and the author expresses a doubt as to the correctness of the determination.

On comparing Mr. Spence's specimen with a specimen of *N. nivea* in my collection (also a South American species, not reported in the United States until found by Prof. Lemmon in Arizona in 1883), I find the resemblance complete, except that the Californian specimen shows no trace of powder on the under side of the frond, which corresponds with the *N. tenera* of H. & B. The pinnæ being less distant may be the result of climatic differences.

In the absence of further evidence Mr. Spence's discovery may, with reasonable certainty, be called *Notholæna tenera*.

Mr. Spence also found a rare form of *Aspidium munitum* in the same locality.—LORENZO G. YATES, *Santa Barbara, Calif.*

William S. Clark, Ph. D.—William Smith Clark, the well-known botanist and educator of Massachusetts, died at his home in Amherst, Mass., March 9th, 1886.

He was the son of Dr. Atherton Clark, and was born in Ashfield, Mass., July 31, 1826. He fitted for college at Williston Seminary, East Hampton, Mass., and entered Amherst College in 1844, graduating with the title of A. B., 1848. For two years after graduating he taught the natural sciences in Willis-

ton Seminary. He then went to Europe, entered the Göttingen University, Germany, and received his diplomas of A. M. and Ph. D. with Prof. C. A. Goessmann, the noted organic chemist and director of the Massachusetts Experiment Station.

Upon his return from Germany he was elected to the chair of chemistry and botany in Amherst College, which he retained until August, 1867, when he was elected president of the Massachusetts Agricultural College. He took active part in the rebellion with the Twenty-first Massachusetts regiment as its colonel.

Colonel Clark was noted for the energy and enthusiasm he put into everything he undertook, and in the class-room he imparted this to his students to such an extent that very thorough and rapid progress was always made. During the last fifteen or twenty years of his life he made the study of plant-life his specialty, and conducted a series of very careful experiments upon the circulation of sap in plants, the expansive force of plant tissues, the movements of plants, rapidity of the movements of sap, etc., most of which are recorded in the catalogues of the Massachusetts Agricultural College and the annual reports of the secretary of the Massachusetts Board of Agriculture.

These papers, which are valuable additions to botanical literature, are perhaps his most important writings, although he was always ready with lectures upon almost all industrial and natural scientific subjects whenever called upon and was a most brilliant and fascinating speaker. In 1876 he was granted a leave of absence and established the Royal Agricultural College at Sapporo, Japan.

His many pupils look back with pleasure to the profitable days spent under his instruction, in which they always found him a true friend and wise counselor.

S. T. MAYNARD.

Tuckerman bibliography.—The following correction and additions may be made to the list on page 74 of this volume.

Notice of some Cyperaceæ of our vicinity : Hovey's *Mag. of Hort. and Bot.* vii. 208-210 (1841).

Descriptions of several new plants of New England : *ibid.* ix. 142-3 (1843).

Carex argyrantha *sp. nov.* : distrib. with descr. Amherst, Aug. 16, 1859 ; published in Wood's *Class-Book of Botany* 1861, p. 753.

Carex glaucodea *Mss.* : *Proc. Am. Acad.* vii. 395 (1868).

Lichens or fungi ? : *Bull. Torr. Bot. Club*, vii. 66-7 (1881).

Review of Minks's *Symbolæ Licheno-Mycologicæ* : *ibid.* ix. 143 (1882).

The Synopsis of the Lichens of the Northern U. S., etc., was first published in *Proc. Am. Acad.* i. 195-285 (1848).—HENRY WILLEY.

Vancouveria.—In the two most recent fascicles of the Bulletin of the Botanical Society of France, M. Franchet has published an elaborate review and monograph of the genus *Epimedium*. Adopting Baillon's idea, he refers back to it the Pacific-coast genus *Vancouveria* of Decaisne, which, M. Franchet insists, differs in nothing but the ternary instead of the binary plan of the blossom. For it seems that some common species of *Epimedium* occasionally produce petals which are not saccate or spurred (which certainly militates